

**PMH36
ECONOMIC EVALUATION OF AGOMELATINE FOR MAJOR DEPRESSIVE DISORDERS RELATIVE TO OTHER ANTIDEPRESSANTS IN THE ITALIAN SETTING**Lanati EP, Lidonnici D
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OBJECTIVES: The purpose of the present study is to conduct an economic evaluation of Agomelatine vs the current alternatives in daily clinical practice for treating patients with major depression disorders (MDD) in Italy (Venlafaxine, Fluoxetine, Sertraline, Escitalopram and Duloxetine). **METHODS:** Using a Markov model-based cost-effectiveness analysis, Agomelatine was compared with other therapies used for the treatment of MDD commonly prescribed (Venlafaxine, Fluoxetine, Sertraline, Escitalopram and Duloxetine), chosen on the basis of market shares, and compared with placebo. The population considered in the model consists of patients suffering from MDD and with an average age of 45 years. The perspective of the third party payer (Italian National Healthcare Service) and the societal perspective were considered. **RESULTS:** The study shows that Agomelatine administration is linked with higher direct and indirect costs only when compared with Duloxetine (respectively €4,365 vs. €4,253 and €5,553 vs. €5,484). Nevertheless, Agomelatine has the higher efficacy in terms of QALY gained (1.477) in comparison to all comparators considered in the analysis. According to the societal perspective, Agomelatine is dominant against Venlafaxine, Escitalopram, Fluoxetine and Sertraline, since it is less expensive and more effective and cost-effective compared to Duloxetine since the incremental cost per QALY gained is €12,461. According to the perspective of the Italian NHS, Agomelatine is dominant versus Venlafaxine, Fluoxetine and Sertraline and is cost-effective in comparison to Duloxetine (ICER 6,101 €/QALY) and Escitalopram (3,336 €/QALY). **CONCLUSIONS:** The present economic evaluation indicates that Agomelatine provides greater benefit and is less costly compared to generic Venlafaxine, generic Escitalopram, generic Fluoxetine and generic Sertraline and that Agomelatine is cost-effective compared to Duloxetine. In conclusion, according to its favorable tolerability profile and its proven efficacy, Agomelatine represents a powerful tool for many patients suffering from MDD, which may lead to both clinical and economic advantages.

**PMH37
RETROSPECTIVE DATABASE STUDY ON HEALTH CARE RESOURCE UTILIZATION OF PATIENTS INITIATING LONG-ACTING OLANZAPINE IN SWEDEN**Tockhorn A¹, Johansson S², Borgeke H³¹Eli Lilly UK, Windlesham, Surrey, UK, ²IMS Health Sweden, 113 46 Stockholm, Sweden, ³Eli Lilly and Company, Stockholm, Sweden

OBJECTIVES: The Swedish national payer, TLV, was interested in understanding how OLAN is used in routine clinical practice regarding dosing and its impact on psychiatric-related hospitalization. **METHODS:** Three Swedish nationwide health registers: the patient register, the drug register and the mortality register were linked. Patients with ≥1 prescription of OLAN and one diagnosis of schizophrenia or schizoaffective disorder prior to initiation of OLAN were included in this retrospective patient mirror-image study. The minimum follow-up was six months. The study period was from 03/2010 until 12/2011. The average number and duration of hospitalizations were compared before and after initiation with OLAN using a Student's t-test. **RESULTS:** 70 patients met the inclusion criteria. The proportion of patients being hospitalized ≥1 was 77% in the pre-index period and 67% in the post-index period. The number of outpatient visits increased from 45% prior to OLAN to 77% post initiation. The results showed a significant reduction in the mean length of stay per hospitalization (19.6 days vs 3.9 days [p<0.001]), and in the mean total number of days spent in hospital per patient (52.3 days vs. 16.2 days [p<0.001]). No significant difference was seen in the number of hospital visits between the pre- and post-initiation periods, although there was a numerical decrease observed within the post-index period. The average dose of OLAN was 18.1 mg per day (95% CI: 16.6 mg; 19.7 mg) and the prescription refill period was 19.6 days (95% CI: 17.7 days; 21.5 days). **CONCLUSIONS:** This study provides evidence that initiation with OLAN significantly reduces the length of stay per hospitalization and the total days spent in hospital.

**PMH38
USE OF SERVICES AND COST OF AGITATION AND CONTAINMENT IN PSYCHIATRIC HOSPITALS: A SYSTEMATIC REVIEW**Rubio-Valera M¹, Luciano-Devis JV¹, Ortiz JM¹, Salvador-Carulla L², Haro JM¹, Gracia A³, Serrano-Blanco A¹¹Parc Sanitari Sant Joan de Déu, Sant Boi de Llobregat, Spain, ²Centre for Disability Research and Policy, Lidcombe, Australia, ³Ferrer Internacional, Barcelona, Spain

OBJECTIVES: The aim of this study was to evaluate the use of services and costs related to agitation and containment of adult patients admitted to a psychiatric hospital. **METHODS:** Systematic review through searches of Pubmed, CINHAL and Web of Knowledge (using a wide variety of terms related to agitation; inpatient care and use of services/costs); bibliographic references in retrieved studies and expert consultation. Studies published since 1998 were selected in duplicate by reviewing abstracts and full-text papers. **RESULTS:** After removing duplicates, 372 papers were reviewed and 11 included in the review. Four studies were of high quality, 4 of moderate-high to moderate-low quality and three of low quality. Eight of the studies evaluated the impact of agitation on the length of stay and 6 showed that it was associated with longer stays. Four studies evaluated the impact of agitation on readmission and showed a statistically significant increase in the probability of readmission of agitated patients in comparison with non-agitated patients. Two studies evaluated medication, one showed that the mean medication dose was higher in agitated patients and the other found higher costs of treatment compared with non-agitated patients in the unadjusted analysis. Another estimated the costs of conflict and containment related to acute inpatient psychiatric care in UK. The total annual cost in England for all conflict was £72.55 million (£145,177 annual conflict cost per ward) and £106 million for containment (£212,316 annual containment cost per ward). **CONCLUSIONS:** Studies on use of services and costs of agitation are scarce. Overall, agitation has an effect on health care use and costs

in terms of longer length of stay, more readmissions and higher consumption of drugs. The average quality of the studies was moderate. Further research is needed to establish the degree of burden of agitation and containment borne by hospitals and the health care system.

MENTAL HEALTH – Patient-Reported Outcomes & Patient Preference Studies**PMH39
WHICH ADVERSE EFFECTS INFLUENCE THE DROPOUT RATE IN SELECTIVE SEROTONIN REUPTAKE INHIBITOR (SSRI) TREATMENT?**Kostev K¹, Ehlen B², Rex J¹, Engelhard J¹, Altmann V¹, Heilmaier C³¹IMS Health, Frankfurt am Main, Germany, ²IMS Health Germany, Munich, Germany, ³FOM University of Applied Sciences, Essen, Germany

OBJECTIVES: Nowadays selective serotonin reuptake inhibitors (SSRIs) are the most frequently prescribed antidepressants due to their better clinical efficacy, effectiveness, tolerability, and safety, when compared to tricyclic antidepressants or monoamine oxidase inhibitors. However, despite this, especially at the beginning of treatment SSRIs are associated with side effects, which may lead to premature discontinuation of therapy in some cases. Assessment of these factors was the aim of the present study. **METHODS:** This retrospective database analysis used data from 50,824 patients first time treated with SSRIs for major depressive disorder selected from a Electronic Medical Records (EMR) database (IMS Disease Analyzer) in Germany, providing information on SSRI side effects and their influence on premature treatment discontinuation calculated by regression analysis. In addition to that, presence of certain co-morbidities was registered. **RESULTS:** Mean age was 54.5 ± 19 years with two-thirds of study population being female. Most frequently mentioned adverse effects were “discomfort” of the digestive system (10%), sleep disorders (8.6%), and heart rhythm disorders (4%); however, these were of tolerable severity as they did not significantly influence dropout rate. Contrary to that, especially somnolence and younger age (≤ 50 years) increased the chance of premature treatment discontinuation, while patients suffering from cardiovascular risk factors or osteoporosis tended to adhere to therapy. **CONCLUSIONS:** Overall, the findings indicate a good tolerability of SSRIs at the beginning of treatment, whereas occurrence of somnolence leads to non-compliance.

**PMH40
GENERAL BELIEFS ABOUT MEDICINES AMONG DEPRESSED PATIENTS IN SAUDI ARABIA**Aljumah K¹, Hassali AA², Al Mutari A¹, Al Zaide N¹¹MOH, Riyadh, Saudi Arabia, ²Universiti Sains Malaysia, Penang, Malaysia

OBJECTIVES: The aim of this study to explore patients' general and specific beliefs about medicines among depressed patients and effect on adherence. **METHODS:** A cross-sectional design used to measure patients' general and specific beliefs among depressed patients, using BMQ general and specific scale. Patients were recruited from outpatient clinic at AL-Amal hospital in Riyadh (psychiatric hospital) between 2013 and January 2014. **RESULTS:** A total of 403 patients meet the inclusion criteria and were participated in this study. Two hundred three representing 50.37 % of the total study sample, were female, while the remaining 200 (49.6 %) were male, with average 39 years. Half of the patients (52.9%) report low adherence to antidepressant medication. Both low and high adherence group scored high in the necessity beliefs (18.02 (SD 3.91) -18.32 (SD 3.9) respectively with no statistically different. contrariwise patients with high adherence had significantly lower level of concerns belief about antidepressants medication and less harmful belief also the same finding with general overuse belief. **CONCLUSIONS:** General patients beliefs either general overuse or general harm about medication influence patients taking medication behavior and have negative correlation with adherence to medication on another hand only specific concerns belief to antidepressant have a positive correlation with adherence to antidepressant this finding will help psychiatric to improve adherence and clinical outcome by addressing medications taking behavior using a systematic approach based in this finding.

**PMH41
ADHERENCE TO PSYCHOTROPIC MEDICATIONS BY OUTPATIENTS IN PSYCHIATRIC HOSPITAL, USLU BENIN CITY, NIGERIA**Arute JE¹, Eniojukan JE², Eboigbe NP³¹Delta State University, Abraka, Nigeria, ²Niger Delta University, Wilberforce Island, Nigeria,³Delta State University, Abraka, Nigeria, Abraka, Nigeria

OBJECTIVES: Patients adherence studies are essential for evaluating the quality of care delivery of a health facility and patients' role in improving their conditions. The objective of this study is to determine the level of adherence of outpatients to psychotropic drugs and evaluate the impacting factors. **METHODS:** The study was a cross-sectional study done at the psychiatric hospital, Uslu, Benin city, Nigeria from April to September, 2013. Convenient sampling method was used in population size determination for data collection. The participants were adult patients (18 years and above) attending the outpatients psychiatric clinic of the hospital with diagnosis of various psychiatric illnesses. A total of 250 patients participated in the study and a well-structured self-report 10-item questionnaire using the medication adherence rating scale (MARS) was used. Additional information was patients' socio-demographic profile and clinical variables that affect patients' adherence to medications. Adherence to medication data were analyzed with respect to gender and level of adherence and factors that impact patients' adherence. **RESULTS:** The level of patients' adherence to psychotropic was 63.6% and factors found to significantly affect adherence include amount spent per clinic visit, perception of social support, intake of alcohol, medication side effects, and existing denial of illness and use of traditional medicine. **CONCLUSIONS:** The level of adherence to psychotropic medications was fairly high and factors that were significantly related to adherent status were amount spent per clinic visit, perception of social support, intake of alcohol, medication side effects, existing denial of illness and use of traditional

medicine. The study provides a baseline data for further studies on patients' adherence to psychotropic medications.

PMH42

TREATMENT CONTINUATION AND TREATMENT CHARACTERISTICS OF 3 LONG ACTING ANTIPSYCHOTIC MEDICATIONS (PALIPERIDONE PALMITATE, RISPERIDONE MICROSPHERES AND HALOPERIDOL DECANOATE) IN BELGIUM

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OBJECTIVES: Treatment continuation of 3 long acting, injectable, antipsychotic drugs: paliperidone palmitate, risperidone microspheres and haloperidol decanoate, was evaluated in the Belgian outpatient setting using panel data from public pharmacies. Drug dosage, age distribution and frequency of co-prescribed antipsychotic medications were investigated. **METHODS:** IMS Lifelink™ Treatment Dynamics database was used, applying appropriate selection criteria. Three patient cohorts that started paliperidone palmitate, risperidone microspheres or haloperidol decanoate treatment respectively, between 1 December 2011 and 31 August 2012, were analyzed. All cohorts included at least 13 months of follow up. Treatment continuation was investigated. **RESULTS:** After 90 and 180 days, more patients continued treatment with paliperidone palmitate (60.71% and 42.41% respectively) than with risperidone microspheres (39.07% and 26.49%) or haloperidol decanoate (34.23% and 17.57%). Within 3 months after discontinuation, more patients restarted their treatment when using paliperidone palmitate (41%) compared to risperidone microspheres (27%) or haloperidol decanoate (17%). For all therapies, dosing was comparable between treatment initiation and discontinuation. Patients treated with paliperidone palmitate were generally younger (patients ≤ 32 years: paliperidone palmitate, 26%; risperidone microspheres, 17%; or haloperidol decanoate, 5%). Over 1 year, on average 62% of patients used paliperidone palmitate or risperidone microspheres in monotherapy. In contrast, haloperidol decanoate in monotherapy declined over time (from 49% to 28% in 1 year). Medication against extrapyramidal symptoms was on average more used with haloperidol decanoate (37%) than with paliperidone palmitate (16%) or risperidone microspheres (18%). **CONCLUSIONS:** Results of the database research indicate that more patients treated with paliperidone palmitate continued their therapy, restarted therapy and were of younger age than patients receiving risperidone microspheres or haloperidol decanoate. Monotherapy was more frequently observed with paliperidone palmitate and risperidone microspheres while co-medication against extrapyramidal symptoms was less frequently used compared to with haloperidol decanoate.

PMH43

DESCRIBING THE HEALTH STATUS OF SCHIZOPHRENIA CAREGIVERS IN THE SE.U

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OBJECTIVES: Research indicates schizophrenia is a cause of burden for patients and caregivers. This study examined health-related quality of life (HRQoL) and comorbidities experienced by schizophrenia caregivers compared to non-caregivers and caregivers of other conditions. **METHODS:** Data were obtained from the 2010–2011 and 2013 SE. U. (UK, Germany, France, Italy, Spain) National Health and Wellness Survey, an online questionnaire that's representative of the total adult (18+ years) population. Respondents provided information on HRQoL (SF-36v2: mental and physical component summary (MCS, PCS) and SF-6D (health utility) scores), and comorbidities (sleep-difficulties, insomnia, pain, headaches, heartburn, anxiety, depression) experienced in the past 12 months. Schizophrenia caregivers (n=398) were matched to non-caregivers (n=158,989) and other caregivers (n=14,341) on baseline characteristics (age, gender, income, etc.) via propensity scores (1:2). Chi-square tests and ANOVAs were used to determine significant differences across the groups. **RESULTS:** The average age of schizophrenia caregivers was 45.3 (SD=15.8 years), 59.6% were female, and 14.8% reported an income of €50,000/£40,000+. After matching, schizophrenia caregivers reported significantly lower MCS (40.3 vs. 45.9), PCS (46.8 vs. 49.0) and health utilities (0.64 vs. 0.71), compared to non-caregivers (all p<0.001). Schizophrenia caregivers reported experiencing significantly more sleep difficulties (42.7% vs. 28.5%), insomnia (32.4% vs. 18.5%), pain (39.7% vs. 30.4%), headaches (48.0% vs. 42.0%), heartburn (31.7% vs. 22.9%), anxiety (37.9% vs. 23.6%), and depression (29.4% vs. 19.4%) than non-caregivers. Comparing schizophrenia caregivers and other caregivers, schizophrenia caregivers reported lower MCS (40.3 vs. 42.7, p<0.001), and health utilities (0.64 vs. 0.67, p<0.001). Schizophrenia caregivers reported significantly more sleep difficulties (42.7% vs. 36.8%), insomnia (32.4% vs. 26.0%), pain (39.7% vs. 31.5%), and anxiety (37.9% vs. 29.8%) than other caregivers. **CONCLUSIONS:** Schizophrenia caregivers reported worse HRQoL and more comorbidities than non-caregivers and caregivers of other conditions. Providing caregivers with support services to better manage patients effectively may improve caregiver's health status.

PMH44

DOES GIVING CARERS A BREAK IMPROVE THEIR WELLBEING? RESULTS FROM AN EVALUATION USING THE EQ-5D-5L

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OBJECTIVES: Informal carers are widely acknowledged to be an important part of health care provision, as well as a source of substantial cost savings to the health care system. It has been observed, however, that carers have worse health-related quality of life (HRQL) than the general population. As a result of this, the wellbeing of carers has been set as a government priority. In Bristol, UK, the National Health Service and council jointly funded a 12-week scheme to facilitate breaks from

caring. It provided direct payments and aid to allow carers to take a break from caring (with or without the person cared for). Here we investigate the effects of the scheme on carers' HRQL. **METHODS:** In order to conduct the evaluation, a quality of life survey was conducted. Carers were asked to complete questionnaires at Week 0 and Week 12. One of the questionnaires selected for inclusion in both surveys was the EQ-5D (5 level). **RESULTS:** Of the 155 patients completing the Week 0 survey, 97 completed at least some of the Week 12 survey. There was some evidence to suggest a small improvement in HRQL via the EQ-5D-5L (0.62 to 0.66, n=86). Both pre- and post-intervention the estimated mean utility of the cohort was significantly lower than 0.81; the value that would be predicted in the general population given the age and gender characteristics of the cohort. **CONCLUSIONS:** Informal carers have significantly lower HRQL than age-matched controls. While it is not possible to draw firm conclusions around the benefit derived from the intervention, due to the lack of control arm, the evaluation of a carer breaks service indicates a potentially modest benefit.

PMH45

THE IMPACT ON WORK AND SOCIAL ACTIVITIES AMONG CARERS OF CHILDREN WITH ADHD IN SWEDEN RELATIVE TO OTHER NORDIC COUNTRIES

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OBJECTIVES: To understand social and work impacts of caring for children/adolescents with attention-deficit/hyperactivity disorder (ADHD) in Sweden relative to a combined cohort of other Nordic countries (Denmark, Finland and Norway). **METHODS:** Carers in Sweden and other Nordic countries completed the Caregiver Perspective of Pediatric ADHD (CAPPA) online survey capturing carer impacts, including work, social activities and family relationships, due to their child's ADHD. Impacts were explored when the child was "on" and "off" medication (e. g. days medication not taken). Comparisons of "on" and "off" medication were examined using the Wilcoxon Signed-Rank test. No statistical comparisons of impacts were made between countries. **RESULTS:** 219 Swedish and 249 other Nordic carers of ADHD children aged 6–17 years completed the survey. 37% of Swedish carers reported employment changes (e. g. resigned, changed shift, reduced hours) due to their child's ADHD; 52% of these changes occurred when the child was "on" medication. In the past 4 weeks, 60% of Swedish carers reported missing work and 45% reported being late for work. After excluding outliers (n=15), mean number of hours missed was 4.32 (n=91, SD 2.53) and mean number of times late was 2.91 (n=69, SD 1.35). Swedish carers reported fewer "moderate" to "tremendous" impacts on social life when their child was "on" versus "off" medication (partner relationship strain: 37% vs 67%; relationship strain with other children: 29% vs 57%; social activity interference: 40% vs 59%). Relative to other Nordic countries, more Swedish carers reported being late for work (36% vs 45%) and more "moderate" to "tremendous" interference with social activities while the child was medicated (29% vs 40%). All other impacts described were similar between the two cohorts. **CONCLUSIONS:** While medication helped, it did not completely alleviate child ADHD-related impacts on work and social activities among carers from Sweden and other Nordic countries.

PMH46

CONCEPTUAL COMPREHENSIVENESS OF ANXIETY INSTRUMENTS IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE: EXPLORING THE POTENTIAL FOR CONFOUNDING SOMATIC ITEMS

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OBJECTIVES: Clinically relevant anxiety is a highly prevalent co-morbidity in chronic obstructive pulmonary disease (COPD), affecting up to 74% of patients. However, despite its prevalence, co-morbid anxiety remains under-recognised and under-managed. Furthermore, its identification and measurement can be confounded by the overlap of somatic symptoms between anxiety and COPD. This study sought to evaluate the ability of existing patient-reported outcome (PRO) measures to assess anxiety in COPD through conceptual mapping, with particular attention on the coverage of non-somatic anxiety symptoms. **METHODS:** To determine conceptual comprehensiveness, the content of 12 extant anxiety PROs was mapped to a conceptual model of anxiety in COPD, developed through a qualitative literature review and in-depth qualitative interviews (n=15) of COPD patients with anxious symptomatology. **RESULTS:** The conceptual model contained 29 concepts within five domains (somatic [15 concepts]; psychic tension [5 concepts]; apprehension [5 concepts]; panic [3 concepts]; behavioural [1 concept]). The most comprehensive conceptual coverage was found in the Mind Over Mood Anxiety Inventory which assesses 18/29 (62%) concepts across all five domains. Concept mapping revealed the majority of PROs are biased toward assessing somatic symptoms of anxiety, with no measure providing comprehensive assessment of non-somatic concepts. Indeed, the two most widely used anxiety PROs in COPD research and clinical practice (Beck Anxiety Inventory [BAI] and Hospital Anxiety and Depression Scale) provide sub-optimal coverage of anxiety concepts. In particular, the BAI is heavily weighted toward assessing somatic concepts, with little focus on psychic, apprehensive, panic and behavioural concepts of anxiety. **CONCLUSIONS:** In light of the sub-optimal content validity of extant instruments, including those commonly used in research and practice, there is a need for a comprehensive COPD-specific anxiety PRO. Such an instrument can be utilised in clinical trials for evaluating new products and enhance the accuracy of anxiety screening and measurement in clinical practice.

PMH47

THE ANXIETY INVENTORY FOR RESPIRATORY DISEASE (AIR): AN EXPLORATION OF THE AIR'S PSYCHOMETRIC PROPERTIES THROUGH RASCH ANALYSIS

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OBJECTIVES: The Anxiety Inventory for Respiratory Disease (AIR) is a novel, non-somatic patient-reported outcome (PRO) measure of anxiety among patients with chronic obstructive pulmonary disease (COPD). Traditional psychometric meth-